BORING TRACES ON OYSTERS FROM THE LOWER CRETACEOUS (BERRIASIAN-LOWER VALANGINIAN) OF THE NEUQUÉN BASIN, WEST-CENTRAL ARGENTINA: FIRST RECORDS OF BORING POLYCHAETES, ACROTHORACIC CYRRIPEDS AND PREDATORY INTERACTIONS

A. G. Toscano*, L. Luci, C. S. Cataldo, D. G. Lazo

Instituto de Estudios Andinos Don Pablo Groeber (IDEAN), Universidad de Buenos Aires-Consejo Nacional de Investigaciones Científicas y Técnicas, Ciudad Autónoma de Buenos Aires, Argentina

*atoscano@gl.fcen.uba.ar

Keywords
biotic interactions, ichnology, *Oichnus*, predation, palaeoecology

A number of boring traces were recorded on oysters of early Berriasian-early Valanginian age (Vaca Muerta and Mulichinco formations). Particularly, six ichnogenera corresponding to two ethological classes were recorded on 188 valves (from a total of 2060) belonging to the genera ***Aetostreon***, ***Ceratostreon*** and ***Nanogyra***. Five domichnia ichnogenera were identified: closely spaced groupings of small circular borings, assignable to ***Entobia*** isp., and club-shaped borings, assignable to ***Gastrochaenolites*** isp., commonly recorded previously on oyster valves from the Neuquén Basin and associated with drilling sponges and bivalves, respectively. Galleries with more or less sinuous branches, assignable to ***Maeandropolydora*** isp. and ***Caulostrepsis*** isp., commonly associated with polychaete activity; and slit to comma-shaped borings, assignable to ***Rogerella*** isp., commonly associated with acrothoracic cirripeds activity, were recorded for the first time for this time interval of the Neuquén Basin. These borings point to the presence of organisms and palaeocological interactions previously unknown for this horizon. In addition, both complete and incomplete circular individual borings were recorded, assignable to praedichnia ***Oichnus*** isp., usually associated with predation by gastropods or octopods. The frequency of drilling predation is low (***A. latissimum***: 0.028; ***A. subsinuatum***: 0.037; ***N. brevisulcata***: 0.032; ***C. hilli***: 0.0063) and similar to that obtained for other Early Cretaceous examples. This type of predatory drill trace is particularly scarce in the Lower Cretaceous of South America. Hence, these records would help fill the so-called Mesozoic stage gap (Permian-Lower Cretaceous), in which these predatory interactions are rarely recorded, primarily related to little specialized and/or facultative predatory organisms.

This is contribution C-178 of IDEAN